

Interactive comment on “Only small changes in soil organic carbon and charcoal concentrations found one year after experimental slash-and-burn in a temperate deciduous forest” by E. Eckmeier et al.

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The authors describe short-term effects of experimental burning on the amount and distribution of charcoal in soil. The way how BC contents were derived is briefly described in their material and methods section. However, a more detailed information on the DRIFT-methodology would certainly help the reader to better understand and evaluate the presented data. Possible improvements include:

How was the calibration data set obtained (currently no accessible reference is pro-

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vided)? Does calibration refer to bulk soil samples or size fractions < 53 microns?

Does the high coefficient of determination of $R^2 = 0.86$ refer to calibration or independent validation of the DRIFT-PLS procedure? What are the errors of prediction of the samples from Germany using the PLS model from Australia?

In Table 2, standard errors for charcoal concentrations are listed. Does this error refer to the variability of field replicates or does it also include the error from the PLS-model?

MIR-PLS has received growing attention during the last years because of its potential to substitute more demanding methods. Application of this method should, however, include some error analysis in order to assess the quality of the results.

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